

REMARKS/ARGUMENTS

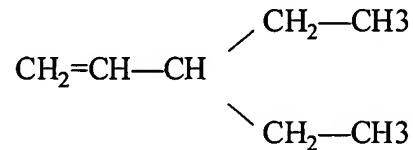
Claims 1-83 are pending in this application. The Examiner requests election to one of the four groups outlined on page 2 of the June 20, 2003 office action. Furthermore, the Examiner requests election of a single disclosed species from the six species disclosed on page 5 of the June 20, 2003 office action. During a telephone conversation with Lee Spencer on June 11, 2003, a provisional election was made to prosecute the invention of group III and species (i), claims 41-51, 57-69 and 72. Applicant hereby elects group III and species (i) without prejudice, claims 41-51, 57-69 and 72. Claims 1-40 and 73-83 have been canceled. Claims 52-56 and 70-71 have been withdrawn.

The Examiner has objected to claim 48 in that it is not clear how the amount of ethylene can be based on the moles of polymer units derived from styrene. Claim 48 has been amended and Applicant believes it to be in allowable form. Applicant kindly asks the Examiner to reconsider his objection

The Examiner has objected to claim 51 under 37 CFR 1.75(c) as being improper dependent form for failing to further limit the subject matter of a previous claim. The Examiner states that since claim 50 uses the term "C₃-C₈ alpha olefin" specifically, the six possible embodiments recited in claim 51 are understood. However, there are isomers of the alpha-olefins within claim 50 that make claim 50 broader than claim 51. For example, compare the two compounds below:



and



The two compounds are both C₇ alpha olefins, therefore claim 51 limits claim 50 and therefore the dependency is proper. Applicant kindly asks the Examiner to reconsider his objection.

RESPONSE TO REJECTION UNDER 35 U.S.C. § 112

The Examiner has rejected claim 61 under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states:

The claim uses the terms "organic acids" and "powdered polymers". Since these are not described adequately, and since the generic label encompassed hundreds of embodiments, without qualification, the claim remains vague and indefinite.

Office Action, June 20, 2003, page 7

The Applicants have considered the Examiner's reasons and respectfully disagree. The Applicants reasons are stated as follows.

Breadth of a claim is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph. See MPEP 2173.04.

Organic acids and powdered polymers are well known to those skilled in the art and therefore do not render claim 61 vague or indefinite. Furthermore, polymer powders are described on page 16 of the specification at lines 23, "powdered polymers which exhibit a TMA of greater than 75 °C, such as powdered polyethylene, polystyrene, and polypropylene." Therefore, Applicant feels the rejection is overcome.

RESPONSE TO REJECTION UNDER 35 U.S.C. § 103

Claims 41-51, 57, 58, and 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,433,097 to Tawada et. al. in view of U.S. Patent No. 5,739,200 to Cheung et al. In making the rejection, the Examiner states the following:

Tawada et al. discloses a process for producing a mechanical mixture of talc and polymer particles wherein talc may be partially adhered to polymer particles by embedding the filler within the polymer particles (col. 2, line 45-55). Calcium stearate is included in the composition as a stabilizer (col. 9, line 20 and col. 11, line 44). According to the inventors, the amount of talc lies within the range of 1-30 wt% (col. 4, line 28).

Cheung et al. teaches interpolymers comprising (1) 5-65 mole % of polymer units derived from (a) at least one vinylidene aromatic monomer, (b) at least one hindered aliphatic or cycloaliphatic vinylidene monomer, or (c) a combination of (a) and (b), and (2) 35-95 mole% of polymer units derived from at least one C2-20 α -olefin.

Although the application of the Tawada et al. patent is focused on making PVC compositions, the inventors indicate that the composition may also contain ABS, MBS, chlorinated PE, and EVA resins. It can be gleaned from this teaching that the method would be applicable to a variety of host resins other than PVC. Therefore, one having ordinary skill in the art, having read and understood both references, would find it obvious to use the polymers of

Cheung et. al in the same process described in Tawada et al. in order to arrive at the subject matter of present claims. The combination is obvious since the collective teachings of the references would have suggested to the skilled artisan that such an embodiment would work with a reasonable expectation of success.

Office Action of June 20, 2003, pages 8-9

To reject claims of an application under 35 U.S.C. 103(a), an examiner has the burden of establishing an unrebutted *prima facie* case of obviousness. See *In re Deuel*, 51 F.3d 1552, 1557, 34 U.S.P.Q.2d 1210, 1214 (Fed. Cir. 1995). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143.

In the absence of a proper *prima facie* case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. See *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992). Obviousness cannot be established by modifying or combining the teaching of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the modification or combination. See *In re Geiger*, 815 F.2d 686, 688, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). Furthermore, the motivation to modify or combine the teachings of the prior art must be identified in making and sustaining an obviousness rejection. See *In re Rouffet*, 149 F.3d 1350, 47 U.S.P.Q.2d 1453 (Fed. Cir. 1998) (reversing an obviousness rejection for lack of identification by the Examiner and the Board of motivation to combine prior art references). Where cited references, alone or in combination, do not suggest or teach the claimed invention, no *prima facie* case of obviousness has been established and such obviousness rejection is improper. *In re Fine*, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988); *In re Evanega*, 829 F.2d 1110, 4 U.S.P.Q.2d 1249 (Fed. Cir. 1987) (reversing an obviousness rejection because the prior art did not teach a claimed limitation). In other words, the absence of a suggestion to combine in the prior art references is dispositive of an obviousness determination. See *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1578-79, 42 U.S.P.Q.2d 1378, 1383 (Fed. Cir. 1997).

The Applicants have reviewed these references and respectfully disagree that these references, alone or in combination, anticipates or renders the claimed invention obvious for the following reasons.

Claim 41 is for a composition comprising (a) polymer particles having (1) a one millimeter penetration temperature of less than about 75 °C as determined by thermal mechanical analysis; or (2) an unconfined yield strength of greater than about 15 pounds per square foot (73 kilograms per square meter); or (3) both (1) and (2); (b) an effective amount of anti-blocking agent mechanically adhered to the polymer particles. The polymer properties recited in the claim, penetration temperature and unconfined yield strength, are necessary to have the unexpected property of free-flowability.

Tawada et al. discloses blending talc with monomers and then polymerizing such blend to produce a polymer product having improved impact resistance and tensile strength. The polymer product of Tawada et al. does not have the claimed properties of penetration temperature and unconfined yield strength. 4/2?

Cheung et al. discloses interpolymers prepared by polymerizing one or more alpha-olefins with one or more vinylidene aromatic monomers and/or one or more hindered aliphatic or cycloaliphatic vinylidene monomers. However, the polymers of Cheung et al. do not have the claimed properties of penetration temperature and unconfined yield strength. 5

The Applicant disagrees that there is motivation to combine the two references. However, even if the two references are combined, the claimed invention is not obvious. All the limitations of the claimed polymer are not found in the prior art and therefore, the combination of the prior art does not teach the limitations necessary to make the polymer particles free-flowing. Since the prior art does not teach, disclose, or suggest the claimed composition, the prior art does not establish a *prima facie* case of obviousness. Therefore, claims 41-51, 57, 58, and 61-63 are patentable over prior art.

} Your job to show

Claims 41, 57-62, 64-69 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,060,510 to Himes et. al. In making the rejection, the Examiner states the following:

Himes et al. teaches a dry blending process for preparing a composition comprised of a thermoplastic polymer selected from the group consisting of polystyrene, polyethylene, polypropylene, and mixtures thereof, talc, and plasticizer (claim 11). The amount of talc varies depending on end use, but it lies within the range of 0-150 phr (col. 5, line 10). The reference shows that dry blending occurs at a temperature between 175-250 °F (79-121°C). In view of the fact that this mixing process is essentially the same as that disclosed in the present application (page 20, lines 12-28), a reasonable basis exists to believe that the process described in Himes et al. results in the formation of polymer particles containing talc particles mechanically adhered thereto. A sufficient basis also exists to believe the properties recited in present claims 66-69 will be met since the processes described in the prior art and current application are the same. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Office Action of June 20, 2003, pages 9-10

The Applicants have reviewed this reference and respectfully disagrees that this reference renders the claimed invention obvious for the following reasons.

Himes et al. discloses dry-blending of block co-polymers. The block co-polymers of Himes et al. do not have the claimed properties of penetration temperature and unconfined yield strength. All the limitations of the claimed polymer are not found in the prior art and therefore, the prior art does not teach the limitations necessary to make the polymer particles free-flowing. Since the prior art does not teach, disclose, or suggest the claimed composition, the prior art does not establish a *prima facie* case of obviousness. Therefore, claims 41, 57-62, 64-69 and 72 are patentable over prior art.

Claims 41-51, 57-62, 64-69 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/10015 to Park et. al. In making the rejection, the Examiner states the following:

Park et al. discloses a mixture of granulated ethylene-styrene copolymer and 0.02 phr of talc (page 27, lines 29 and 31). This mixture is preblended, then fed into an extruder where it passes through a feeding zone at 160 °C and a transition zone at 177 °C, prior to the melting zone (page 27, line 36). In view of the fact that this mixing process is essentially the same as that disclosed in the present application (page 20, lines 12-28), a reasonable basis exists to believe that the process described in Park et al. causes sufficient softening of the polymer particle, resulting in the formation of polymer particles containing talc particles mechanically adhered thereto. A sufficient basis also exists to believe that the properties recited in present claims 66-69 will be met since the processes described in the prior art and current application are the same. Since the PTO can not perform experiments, the burden is shifted to the

Applicants to establish an unobviousness difference. In re Best, 562 F.2d 1252, 195 USPQ 430, 433 (CCPA 1977). In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Since the patent also teaches the interpolymers of the present invention (see claims 1 and 2), the compositional features of claims 42-51 are obvious over Park et al.

Office Action of June 20, 2003, page 10

→ Park et al. discloses ethylene-styrene copolymers. However, the Park et al. polymers do not have the claimed properties of penetration temperature and unconfined yield strength. All the limitations of the claimed polymer are not found in the prior art and therefore, the prior art does not teach the limitations necessary to make the polymer particles free-flowing. Since the prior art does not teach, disclose, or suggest the claimed composition, the prior art does not establish a *prima facie* case of obviousness. Therefore, claims 41, 57-62, 64-69 and 72 are patentable over prior art.

CONCLUSION

Applicants have addressed all of the Examiner=s rejections. In conjunction with the claim amendments and arguments above, Applicants believe that the claims are now in condition for allowance and respectfully request that the Examiner grant such an action. If any questions or issues remain in the resolution of which the Examiner feels will be advanced by a conference with the Applicants= attorney, the Examiner is invited to contact the attorney at the number noted below.

A check in the amount of \$110.00 is enclosed for a one-month extension. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Deposit Account No. 10-0447, reference 43225-44598AUSP(BAI).

Respectfully submitted,

JENKENS & GILCHRIST
A Professional Corporation

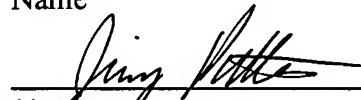
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Date: 10/20/03

CERTIFICATE OF MAILING BY EXPRESS MAIL

I, Jimmy Patterson, do hereby certify that the foregoing documents are being deposited with the United States Postal Service as Express Mail Post Office to Addressee Service, postage prepaid, prior to the last scheduled pickup, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on this date of October 20, 2003.

Jimmy Patterson

Name


Jimmy Patterson

Signature

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October 20, 2003

Date of Deposit